

overview of native *phragmites*

Growth habit/density. Native *Phragmites* typically occurs in low density stands often comingled with other native plants but it can occur in very dense stands more typical of the introduced form.

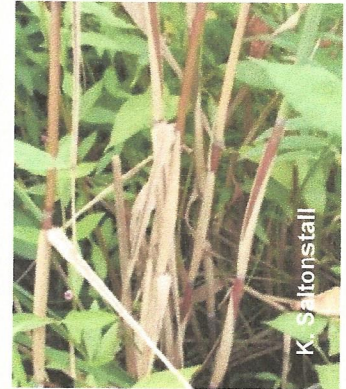
***Leaf sheaths** fall off the culm easily once the leaf dies particularly at the lower nodes where they may no longer be present when the plant flowers.

Leaves are typically lighter in color than the exotic, often yellow-green.

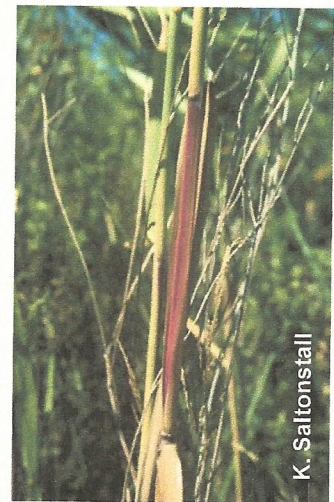
Culms (stems) are somewhat delicate, smooth to the touch, appear somewhat shiny and often have a red to chestnut color towards the base, particularly where the leaf sheaths have opened up or fallen away from the culm, exposing the typically enclosed culm to direct sunlight. Culms may not remain standing through the winter.

Spots on culms can occur and are caused by a native fungus that has not adapted to the exotic form.

Flowers occur 3-4 months after spring growth is initiated; the inflorescence plumes may be sparse in comparison to the exotic forms and may not persist through the winter.



Detaching leaf sheaths



Red color on exposed internode area of culm



R.E. Meadows



B. Blössey

overview of introduced (invasive) *phragmites*

Growth habit/density. Introduced *Phragmites* typically forms very dense stands which include both live stems and standing dead stems from the previous year's growth.

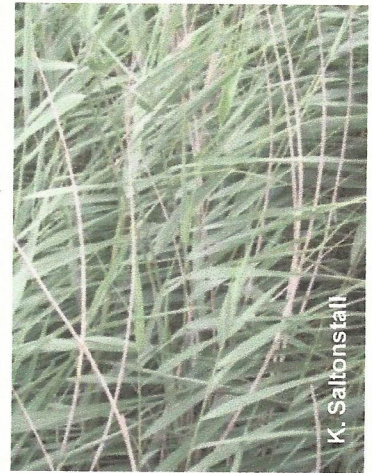
***Leaf sheaths** adhere tightly to the culm throughout the growing season and persist on the culm as long as it remains standing.

Leaves are blue green and usually darker than the native forms.

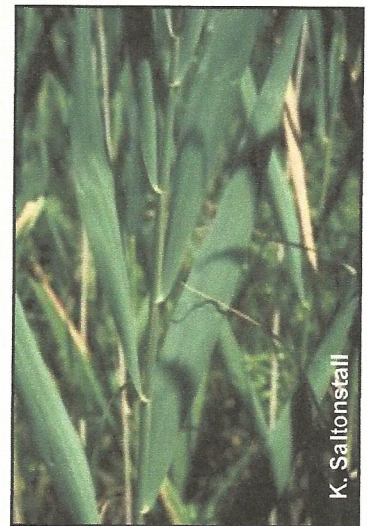
Culms can reach 15 feet, are very rigid, and are slightly ridged with a rougher texture than the native.

No spots on culms. Fungal spots are not typically present but here may be some mildew.

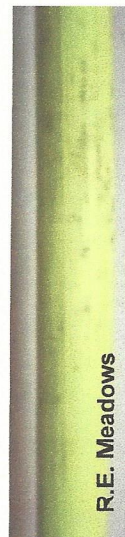
Flowers occur typically in August and September and form bushy panicles that are usually purple or golden in color.



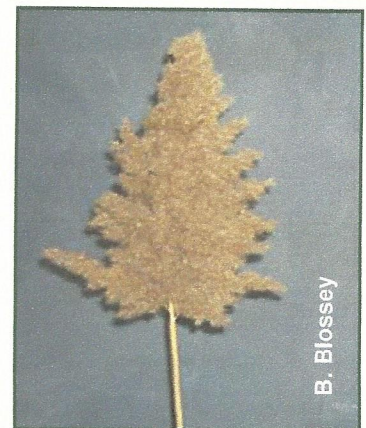
Live and dead culms form a dense monoculture



No red color at internode



R.E. Meadows



B. Blossy